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Research Paper

Board Quality and Corporate Sustainabiltiy of Nigerian Multinationals

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ABSTRACT
The purpose of this study examines the board quality and corporate sustainability of Nigerian multinationals. *The objective of the study is to examine the influence of board quality, board independence and board size. The study employs a longitudinal research design by sampling twelve (12) quoted multinational companies in Nigerian Stock Exchange for the period of 2012 to 2017. The study conducts descriptive Statistic, Pearson correlation matrix, variance inflation factor and multivariate regressions technique for the empirical analysis. The variance inflation factor test shows* the absence of *multicolinearity among the independent variables and the multivariate regression results show that board size has a significant positive influence on corporate sustainability while board quality and board independence has an insignificant negative influence corporate sustainability. The study recommends that management of multinational companies in Nigeria should maintain a minimum of board size of not below nine (9) for enhancing corporate sustainability disclosures.*
KEYWORDS: *Board Independence, Board Quality, Board Size, and Corporate Sustainability.*

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I. INTRODUCTION

Board quality as a corporate governance parameter has gained more prominence due to its promotion of transparency, fairness and honesty in financial reporting, compliance with ethical and regulatory standard, accountability to shareholders and the efficacy of the board of directors regarding its responsibilities for the oversight of the management operations (Ilaboya & Obaretin, 2015). Scholars and researchers documented that mechanism of corporate governance impacts on the earnings quality as well as the board quality (Imeokparia, 2013; Adeyemi & Fagbemi 2010; Adeyemi & Uadiale 2010; Sukeecheep, Yarram, & AlFarooque, 2013). The board structure in any multinational companies gives it the overview of the standard of operations of the organization, which influences its public image for better board quality (Obigbemi, Omolehinwa, Mukoro, Ben-Caleb & Olusanmi, 2016). Nwonu, Onodugo, Agbaeze and Nwoba, (2019) argue that operational activities of multinational corporations in Nigeria play a dominant role in enhancing the economic development and economic growth with flexible corporate governance framework for improve board quality.

The operations of the multinational companies in Nigeria call for sustainable policy development for the stimulation of action that should enhance better management and board quality of the environmental disclosures to cushion the adverse effect, optimization of the production processes to develop sustainable production and consumption process (Obamen, Omonona, Okenwa & Johnny (2019). Corporate sustainability provides information that increases corporate transparency and accountability in economic, environmental, social and governance terms; it provides information not entirely captured in corporate financial statements such as statement of financial position, statement of comprehensive income and statement of cash flows (Nwobu, 2017). Sainthouse (2009) argues that the competitive argument recognizes the fact that addressing social issues comes at a cost to multinational business. That is sustainability should be part of the corporate objectives of a multinational companies because it may be seen as a key indicator to determine the true worth and value of modern organizations through their ability to give back to the society part of their income through mutually beneficial initiatives (Nkanbra & Okorite, 2007). There is also advocacy that sustainability reporting should reflect in internal organizational processes of multinational companies to enhance its board quality and authenticity (Herschovis, Herremans, & Warsame, 2009). This has left a research gap in knowledge. Therefore, the study filled the gap in knowledge by establishing the relationship between board quality and corporate sustainability of Nigerian multinationals with the use of in the analysis of data justifies the existence of an identified problem for which this study is absolutely necessary and inevitable.

II. LITERATURE REVIEW HYPOTHESES DEVELOPMENT

Corporate Sustainability

Corporate sustainability is seen as a process of corporations achieving the goals and progress of business operations today without compromising the business operation of the immediate future (Boudreau & Ramstad, 2005). Filho (2000) cited in Obamen, Omonona, Okenwa and Johnny (2019) defines corporate sustainability as a process of development that every countries must pursue to progress economically and socially without impacting on the resources of the environment while maintaining ethically acceptable, morally fair and financially sound. Ford, Ford and McNamara, (2002) is of the view that the Charter of the sustainability committee constituted by the board of directors at Ford place its primary goal on sustainable growth which all stakeholders of the corporations must address. However, Rosen (2012) cited cited in Obamen, Omonona, Okenwa and Johnny (2019) noted that for successful attainment of sustainability and growth, financial, ecological and social indicators must be properly harnessed. Kelly and Florence (2014) examined environmental management and sustainability of the Niger Delta region of Nigeria for quality living. The specific objectives of the study were to investigate the relationship between commitments by Federal Government to corporate environmental management policies and sustainable quality living, and to assess the relationship between true development agenda of the multinational corporations in the region and sustainable development. They documented that lack of sound environmental management policy, poor commitment and ill-implementation of environmental policies, poor environmental management practices and weak development goals are some of the hindrance to the sustainability of quality living and improve welfare of the host community in the Niger Delta. Obamen, Omonona, Okenwa and Johnny (2019) maintain that there are indicators of sustainability such as economic, social and the environment as well as financial. The financial indicator of corporate sustainability ensures that societies pursue growth paths for the generation of an optimal cash flow of income while maintaining their basic stock of human-made capital, human capital and natural capital, the economic indicators of sustainability ensures that all relevant are internalized associated with environmental, production and consumption. The core aims of financial sustainability are to expand the creation of product and services and reduction of poverty level among the host community.

Board Quality

Board quality is achieved when the board is independence and also a diverse board with a reasonable number of female representatives in the board. Dowen (1995) examined the relationship between board quality and performance. The sample size was drawn from a Fortune of 1000 firms for the data analysis with ordinary least square statistical tool. The empirical results show that boards quality was measured by the average number of board sitting held by each director (board meetings) were related with the quality of firms as measured by both accounting and market performance. Rosemarie (2016) studied the effect of quality management practices on the performance of manufacturing firms in Kenya. The study employs the use descriptive and explanatory research design in the manner at which data would be sourced. Primary data was collected with the help of a research instrument (questionnaires) and the questionnaire was validated through the face, and content validity. The multiple linear regression was use to analyse the data. It the regression results show that continuous improvement of the board for better quality and corporate sustainability performance was positive and significantly related. This implies that the presence of board quality enhances the level of corporate sustainability. The study recommended that the multinational corporations should maintain high level of board quality that would aligned with the objectives of multinationals companies. Obamen, Omonona, Okenwa and Johnny (2019) conducted a study on the effects of environmental management practices on the sustainability of multinational companies in south-south, Nigeria. Data were drawn from secondary sources such as journal publication, book, unpublished article and thesis, newspapers, and organizations websites. It would be documented that board quality (quality management practices) and corporate sustainability were positively related. This implies that corporate sustainability of multinational companies in Nigeria and business environment depend on environmental management practices are tied to board quality. The study recommends that government should strengthen institutions and regulatory agencies of multinational companies for enforcement of environmental laws in line, with section 20 of the 1999 constitution of Federal Republic of Nigeria. Therefore, the hypothesis is formulated as: Board quality has a significant influence on corporate sustainability of multinational companies.

Board Independence

Board independence is one of the vital parameter for board quality for controlling and monitoring mechanisms in the area of corporate sustainability and financial reporting (Abidin, Ahmad-Zaluki & Ilona, 2011). Fama and Jensen (1993) claim that for a board to be independent it should have a significant outside directors as the majority for the enhancement of board quality. They believed that independent directors are more vigilant in monitoring behaviours and decision making of the company which is a prerequisite for board quality. It is of a general perception that independent directors are part-time board members and they assume the status of non-executive directors. Haniffa and Hudaib (2006) investigated the relationship between corporate governance structure and performance of Malaysian listed companies. The study made use of regression technique for the analysis of data. It would be reveal from the regression results that board independence and corporate sustainability performance were significantly related. Lefort and Urzua (2008) examined the relationship between board independence, company performance and ownership concentration in Chile. The study employed ordinary least square regression a statistical tool for data analysis. The results show that there is a significant relationship that exists between board independence and financial disclosures for better corporate sustainability. Therefore, the hypothesis is formulated as: Board independence has a significant influence on corporate sustainability of multinational companies.

Board Size

Tafamel, Dania and Akrawah (2016) define board size as the total number of directors sitting on the board of any corporate organization for oversight functions. A board can be effective if its decision power and influences on the managers is very strong and hereby bring about quality board. Ahmadu, Tukur and Aminu (2011), claim that a significant board size influences the functions of the board tremendously with help of good corporate governance performance which is a signal of board quality. Onuorah, Egbunike and Gunardi (2018) examined the influence of corporate board attributes on voluntary social disclosure of selected quoted manufacturing firms in Nigeria. The study made use of correlational research design to sample forty-five (45) quoted manufacturing companies on the Nigerian Stock Exchange for the period of 2017 and employ pooled OLS and heteroskedasticity-corrected, ordinary least squares to test the hypotheses. It would be reveal from the regression results that board size, board structure, board gender, board independence and board remuneration has a significant positive influence on corporate sustainability disclosure while board ownership has a significant negative influence on corporate sustainability disclosure and CEO duality has no significant negative influence on corporate sustainability disclosure. The study recommends management of multinational corporations should embrace board quality and adhering to strict rules for regulating insider shareholding. Opusunju and Ajayi (2016) examined the impact of corporate governance of corporate social responsibility of Dangote Group of companies in Nigeria. It the regression results show that board size has a significant positive influence on voluntary corporate social disclosure. This means that increase in board size would lead to increase corporate sustainability. Yusoff, Jamal and Darus (2016) studied the relationship between corporate governance and corporate social responsibility disclosures in Malaysia. The regression results show that there is a significant relationship between board size and corporate social responsibility disclosures. Therefore, the hypothesis is formulated as: Board size has a significant influence on corporate sustainability of multinational companies.

III. THEORETICAL REVIEW

The agency theory is propounded to address the conflict arising between owners of the multinational corporations (principal) and the employees (agent) (Abidin, Ahmad-Zaluki & Ilona, 2011). The conflict of interest normally arises when the agent is working for own personal goals rather than to pursuing the interest of the principal which is wealth maximising. Jensen and Meckling (1976) argue that to reduce conflict of interest between both parties, the principal has to adopt sound corporate governance mechanism that might board quality and to control the behaviour of the agent. This agency theory acts as a fundamental platform to establish the relationship between board quality and corporate sustainability of Nigerian multinationals.

IV. METHODOLOGY

Research Design

The research design for this study is quantitative research design. The quantitative research design took the form of longitudinal research design. The population of the study is made up of multinational companies quoted on the Nigerian Stock Exchange as at 31st December, 2017. The sample size of the study is made up of twelve multinationals companies listed under Conglomerates, Consumer goods, and Industrial Goods section of the Nigerian Stock Exchange with 65 observations for the year-end 2012 to 2017. The sampling technique adopted for the purpose of this research is the judgmental sampling technique. The focus of our data shall be on secondary sources from the annual financial statements of the companies. The study used only secondary data, extracted from the Annual Reports of the selected multinational companies.

Model Specification

The study adopted a multivariate regression technique to empirically investigate board quality and corporate sustainability of Nigerian multinationals. However, multiple regression technique is seen as a statistical technique which analyses the relationship between a dependent variable (corporate sustainability) and multiple independent variables (board quality parameters) by estimating coefficients for the equation on a straight line (Hair, Black, Babin & Anderson, 2010). The multivariate regression was functionally represented below:

CS = F (BQ, BDI, BS) ……………….…………………………………………………… (1)

The multiple regressions with error term (et) is express in the econometric equation below;

CS= $\beta 0 + \beta 1$ BQ + $\beta 2$BDI + $\beta 3$BS + ε …...……………………………………………… (2)

Where:

Dependent Variable

CS = Corporate Sustainability. Corporate sustainability is proxied by corporate sustainability disclosure.

Independent Variables

BQ = Board quality. Board quality is measured by frequently of board sittings.

The a priori sign; $\beta 1 > 0$

BDI= Bind independence. Board independence is measured by ratio of non-executive to total board size.

The a priori sign; $\beta 2 > 0$

BS = Board size. Board size is measured by the number of directors sitting on the board.

The a priori sign; $\beta 3 > 0$

$\beta 0$ = Constant Coefficient

$\beta 1 - \beta 3$= Explained coefficients of the independent variables

Data Analysis Method

The econometric technique adopted in this study is multivariate regression technique. Pearson correlation matrix is employ to measure the relationship between the variables and a Variance Inflation Factor is conducted to check for the presence of multicollinearity. The analyses are conducted using E-views econometric 9.0 software.

V. PRESENTATION AND DISCUSSIONS OF FINDINGS

In the presentation of data, the study conducted a descriptive statistic, correlation matrix and multivariate regressions. The descriptive statistic result is presented in table 1.

Table 1: Descriptive Statistics

Variables	Mean	Std. Deviation	Jarque-Bera	OBS
CS	1.20	0.70	3.29 (0.19)	62
BQ	4.67	1.36	63.64 (0.00)	62
BD1	62.27	14.87	0.16 (0.92)	62
BS	9.77	3.28	6.32 (0.04)	62

Source: Author's Compilation, 2019

The descriptive statistics shows the description of the mean, standard deviation and normality test. The below is the descriptive statistics of the variables over the given variables for the period of 2012 to 2017. It would be observed from the above table 1 that on the average corporate sustainability (CS) is 1.20 and a standard deviation value of 0.70. This means that there is still low level of corporate sustaining reporting by multinational companies in Nigeria. On the average, board quality (BQ) measured by frequently of board sitting is 4.67 and a standard deviation value of 1.36. This means that the frequently of board sitting is five (5) approximately on the average. Board independence (BDI) on the average is 62% and a standard deviation value of 14.87. This therefore means that the multinationals quoted companies in Nigeria Stock Exchange has more independent directors sitting on the board. Board size (BS) has an average value 9.77 and a standard deviation value 3.28. This implies that there was a sizeable board of nine (10) on the average is maintained by the sampled quoted multinationals companies. Lastly, the Jarque-Bera (JB) statistics shows that board quality and board size are normally distributed while corporate sustainability and board independence are abnormally distributed. Therefore, the correlation matrix result is presented in table 2 below;

Table 2: Correlation Matrix Result

Variable	CS	BQ	BDI	BS
CS	1			
BQ	0.3274	1		
BDI	0.3373	0.1204	1	
BS	0.5385	0.4815	0.3567	1

Source: Author's Compilation, 2019.

The coefficient of the correlation results show that corporate sustainability (CS) and board quality (BQ) is positive and moderately correlated (0.3274). This there means that corporate sustainability might be by influence by board quality. Corporate sustainability (CS) and board independence (BDI) is positive and moderately correlated (0.3373). This there means that board independence might influence corporate sustainability positively. Corporate sustainability (CS) and board size (BS) is positive and moderately correlated (0.5385). A careful look at the correlation coefficient revealed that a positive association exists between the dependent variable and independent variables. To check for the presence of muiticolinearity among the independent variables, a Variance Inflation Factor is conducted and the mean aggregate value of 1.3067 reveals the absence of multicolinearity. This means that there is the absence of multicolinearity problem in our model. Multicollinearity between explanatory variables may result to wrong signs or implausible magnitudes, in the estimated model coefficients, and the bias of the standard errors of the coefficients. In order to test the individual significance of the variables, a multivariate regression technique is adopted and the result was presented in table 3 below;

Table 3: Multivariate Regression Results

Variable	Coefficient	Std. Error	t-test	p-value
C	-0.44	0.39	-1.10	0.2729
BQ	0.05	0.06	0.81	0.4210
BDI	0.008	0.005	1.54	0.1429
BS	0.09	0.02	3.26	0.0018

R^2-Square = 0.321801
Adjusted R^2-Square = 0.286722
F-Statistic = 9.173535
Prob (F-Statistic) = 0.000046

Source: Author's Computation (2019)

It would be observed from table 3 that the coefficient of determination (Adj.R^2) value of 0.286722 that about 29% of the systematic variations in the dependent variable (corporate sustainability) are jointly explained by the independent variables (board quality, board independence and board size). This means that the model overall is good for statistical prediction. The F-statistic value of 9.173535 and it associated p-value of 0.000046 shows that there is a significant linear relationship between the given variables. The empirical results show that board quality (BQ) has an insignificant positive influence on corporate sustainability (CS). This therefore means that increase in board quality would lead to an increase in corporate sustainability reporting but it is statistically insignificant. The result is contrary to the findings of Rosemarie (2016) and Obamen, Omonona, Okenwa and Johnny (2019) that board quality and corporate sustainability are positively related.The study therefore suggested the hypothesis should be rejected that board quality has a significant influence on corporate sustainability. Also, board independence (BDI) has an insignificant positive influence on corporate sustainability (CS). This therefore means that increase in board independence would lead to an increase in corporate sustainability reporting but it was statistically insignificant. The result is contrary to the findings of Haniffa and Hudaib (2006) and Lefort and Urzua (2008) that a significant relationship that exists between board independence and corporate sustainability. The study therefore suggested the hypothesis should be rejected that board independence has a significant influence on corporate sustainability reporting. In the case of board size (BS), the variable has a significant positive influence on corporate sustainability reporting (CS) at 1% level of significance. There is 99% confidence level that increase in board size would lead to an increase in corporate sustainability reporting but it is statistically significant. The result is consistent with the findings of Onuorah, Egbunike and Gunardi (2018) and Opusunju and Ajayi (2016) that board size has a significant positive influence on corporate sustainability disclosure. The study therefore suggested the hypothesis should be accepted that board size has a significant influence on corporate sustainability reporting.

VI. CONCLUSIONS AND RECOMMENDATIONS

This study focuses on board quality and corporate sustainability of Nigerian multinationals. Board quality as a corporate governance parameter has gained more prominence due to its promotion of transparency, fairness and honesty in financial reporting, compliance with ethical and regulatory standard, accountability to shareholders and the efficacy of the board of directors regarding its responsibilities for the oversight of the management operations. Corporate sustainability is seen as a process of corporations achieving the goals and progress of business operations today without compromising the business operation of the immediate future (Boudreau & Ramstad, 2005). It is concluded from the multivariate regression results that board size has a significant positive influence on corporate sustainability while board quality and board independence has an insignificant negative influence corporate sustainability. The study therefore recommends:

(i) Management of multinational companies in Nigeria should maintain a minimum of board size of not below nine (9) for enhancing corporate sustainability disclosures.

(ii) Management should set up strategy to maintain high level of board quality in order to improve the level of corporate sustainability in the long-run.

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APPENDIX: RESULTS

Descriptive Statistics

	CS	BQ	BDI	BS
Mean	1.209677	4.677419	62.27306	9.774194
Median	1.000000	4.000000	62.50000	9.000000
Maximum	2.000000	10.00000	94.44000	19.00000
Minimum	0.000000	3.000000	25.00000	4.000000
Std. Dev.	0.704484	1.364349	14.87478	3.281440
Skewness	-0.312691	1.730819	-0.123306	0.751977
Kurtosis	2.059317	6.557259	3.046828	3.430398
Jarque-Bera	3.296300	63.64566	0.162777	6.321722
Probability	0.192406	0.000000	0.921836	0.042389
Sum	75.00000	290.0000	3860.930	606.0000
Sum Sq. Dev.	30.27419	113.5484	13496.80	656.8387
Observations	62	62	62	62

Pearson Correlation Matrix

	CS	BQ	BDI	BS
CS	1.000000	0.327362	0.337348	0.538492
BQ	0.327362	1.000000	0.120417	0.481452
BDI	0.337348	0.120417	1.000000	0.356897
BS	0.538492	0.481452	0.356897	1.000000

Variance Inflation Factor

Variance Inflation Factors
Date: 11/13/19 Time: 06:55
Sample: 1 62
Included observations: 62

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.158063	27.68342	NA
BQ	0.004074	16.91903	1.306890
BDI	3.02E-05	21.64559	1.150504
BS	0.000795	14.78547	1.475938

Multivariate Regressions

Dependent Variable: CS
Method: Least Squares
Date: 11/13/19 Time: 06:54
Sample: 1 62
Included observations: 62

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.440067	0.397571	-1.106888	0.2729
BQ	0.051729	0.063831	0.810411	0.4210
BDI	0.008158	0.005493	1.485110	0.1429
BS	0.092054	0.028204	3.263911	0.0018

R-squared	0.321801	Mean dependent var	1.209677
Adjusted R-squared	0.286722	S.D. dependent var	0.704484

S.E. of regression	0.594978	Akaike info criterion	1.861756
Sum squared resid	20.53193	Schwarz criterion	1.998991
Log likelihood	-53.71444	Hannan-Quinn criter.	1.915638
F-statistic	9.173535	Durbin-Watson stat	1.177801
Prob(F-statistic)	0.000046		